

## WHAT IS CLAIMED IS:

## 1. Motor vehicle alternator of the type comprising:

- a casing carrying a stator, the electrical potential of which is connected to the vehicle earth;
- a rotor whose central shaft is mounted for rotation in the stator, a rear axial end of the rotor shaft which extends axially outside the stator, carrying a pulley for rotationally driving the shaft driven in rotation by a flexible driving element, in particular a belt or a chain;
- and means aimed at eliminating the electrostatic charges on the alternator,

wherein that the said means provide a contactless electrical connection on a controlled external path between on the one hand the casing and on the other hand the pulley and/or the flexible driving element.

2. Alternator according to claim 1, wherein that the said means comprise at least one concentration peak for the electrical charges which is formed on an external face of the casing, and which extends in relief in the direction of a facing portion of the pulley and/or the flexible driving element so as to eliminate the electrostatic charges by the formation of electric arcs between the peak and the said portion.

3. Alternator according to claim 1, wherein that the said means comprise a series of concentration peaks for

the electrical charges.

4. Alternator according to claim 1, wherein that the peaks in the said series are adjacent in order to constitute a collar projecting radially and/or axially, comprising a peripheral end edge free from any sharp profile.

5. Alternator according to claim 2, wherein that at least one peak is produced in one piece with the corresponding part of the casing.

6. Alternator according to claim 2, wherein that at least one peak extends axially from an external transverse lateral face portion of the casing.

7. Alternator according to claim 2, wherein that at least one peak extends radially from an external transverse lateral face portion of the casing.

8. Alternator according to claim 1, wherein that the peak extends in the direction of the external convex cylindrical lateral surface of a tubular axial sleeve of the hub of the pulley.

9. Alternator according to claim 1, wherein that at least one peak extends opposite a facing portion of the transverse lateral face of the flexible drive elements.

10. Alternator according to claim 1, wherein that at least one peak extends opposite a facing portion of a transverse lateral face of the pulley.

11. Alternator according to claim 1, wherein that at

least one peak extends opposite a facing portion of the cylindrical lateral face of the pulley.